



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,435	01/22/2004	Pablo Umana	1975.0180003/TJS	3728

26111 7590 11/09/2009
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

BURKHART, MICHAEL D

ART UNIT	PAPER NUMBER
----------	--------------

1633

MAIL DATE	DELIVERY MODE
-----------	---------------

11/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	Application No. 10/761,435	Applicant(s) UMANA ET AL.	
	Examiner Michael Burkhart	Art Unit 1633	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 26 October 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 5 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: 30-34, 65-68, 73, 74, 82-95, 186, 188-190, 195 and 206-212.
 Claim(s) withdrawn from consideration: 1-29, 35-64, 69-72, 75-81, 96-185, 187, 191-194, 196-205 and 213-286.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
 12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____.
 13. ☐ Other: _____.

/Michael Burkhart/
Primary Examiner, Art Unit 1633

Continuation of 3. NOTE: Independent claims 30, 31, 65 and 186 have been amended to recite that the Golgi localization domain is from a Golgi resident polypeptide "other than the polypeptide that provides the glycosyltransferase activity of said fusion polypeptide." Such a limitation was not previously recited in any claim thus far examined, and therefore requires new search and examination of not only the specification for such broad support of localization domains, but also new search and consideration of the prior art.

Continuation of 11. does NOT place the application in condition for allowance because: Many of applicants arguments are directed to the claim amendments. Because these amendments have not been entered, these arguments are moot. Those arguments that are not reliant upon entry of the claim amendments are set forth below.

Claim Rejections - 35 USC § 103

Claims 68 and 190 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umana et al (WO 99/54342,) as evidenced by Grabenhorst et al (1999, JBC) and Shields et al (JBC, 2002, of record) in view of Russell et al (WO 01/29242 A2, 2001) and Rabouille et al (1995, J. Cell Sci., cited by applicants).

Response to Arguments

Applicant's arguments filed 10/26/2009 have been fully considered but they are not persuasive. Applicants essentially assert that: 1) Umana et al only teach that it might be desirable to redistribute glycosyltransferases if certain structures are found to increase ADCC activity, and that there is no suggestion by Umana et al to move GalT to the medial-Golgi; 2) Grabenhorst et al do not teach moving GalT or GnTIII to the medial Golgi and thus does not cure the deficiencies of Umana et al, Grabenhorst et al does not provide any teaching or suggestion to modify GalT or GnTIII by adding the localization domain of ManII, and there is no reasonable expectation of success when combining Umana and Grabenhorst et al; 3) Shields et al do not teach the redistribution of GalT or GnTIII and thus does not cure the deficiencies of Umana et al, and there is no reasonable expectation of success when combining Umana, Grabenhorst and Shields et al; 4) Russell et al is directed to plant cells whereas the instant claims require mammalian cells and thus does not cure the deficiencies of Umana et al, Russell et al teaches away from the instant invention, and there is no reasonable expectation of success when combining Umana, Grabenhorst, Russell and Shields et al; 5) Rabouille et al do not teach the redistribution of GalT or GnTIII and thus does not cure the deficiencies of Umana et al, and there is no reasonable expectation of success when combining Umana, Grabenhorst, Russell, Rabouille and Shields et al; 6) the teachings of Ferrara et al show that redistribution of GnTIII results in an increased proportion of bisected non-fucosylated hybrid oligosaccharides.

Regarding 1), this is a limited view of the teachings of Umana et al (and of the totality of the prior art cited in this rejection), and applicants provide no support (in the form of page numbers and line numbers) where these alleged teachings can be found in Umana et al. In contrast, the Examiner has provided specific reference to pages and figures outlining the suggestion of Umana et al to modify the localization domain of the GalT enzyme such that it is removed from the GnTIII enzyme. The teachings of Umana et al are not limited to modifying GalT such that it is found in the trans-Golgi, as applicants appear to insist. Umana et al make a broad suggestion that removing GalT to a location after GnTIII in the pathway is desirable in order to decrease competition of these two enzymes for substrates, and suggest 2,6-sialyltransferase (a trans-Golgi enzyme) as an example. Taken with the teachings of the totality of the prior art (which applicants ignore throughout the instant response, as each piece of art is discussed piecemeal), modifying GnTIII to be a medial-Golgi enzyme is an obvious alternative to modifying GalT: it accomplishes the same goal of moving GnTIII to a place in the pathway that is prior to GalT.

Regarding 1) - 5), in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Further regarding 2) - 5), applicants unsupported assertions that there is no reasonable expectation of success when combining the references are less than convincing in light of the reasoning provided by the Examiner and the extensive teachings provided by the prior art of record. "Argument of counsel cannot take the place of evidence lacking in the record." *In re Scarbrough*, 182 USPQ 298, 302 (CCPA 1974).

Further regarding 4), Russell et al is not relied upon to teach mammalian cells, and given the preponderance of references that teach the use of mammalian cells (all of the other references in this rejection, at the least) when using the claimed methods, it is not convincing that Russell et al "teaches away from" the combination of the instant references. It is clear from the totality of the prior art that mammalian cells are desirable for use in the claimed methods. Finally, Russell et al was only relied upon to teach modification of the location of glycosyltransferases in the Golgi when modifying the glycosylation patterns of antibodies. It was not used as a reference to teach the use of mammalian cells.

Regarding 6), the teachings of Ferrara et al are stipulated, but, applicants do not explain (and it is not entirely clear), how these teachings mitigate against the instant rejection. It is also noted Ferrara et al was published in 2006, and the instant application seeks a priority date of 2003.